

### Price catcher system:

- A system that compares and gets reasonable prices for basic items when grocery stores or supermarkets offer them.
- Helps users to compare and check prices before deciding to buy goods.
- To save time and costs, users can also make price comparisons between different premises

### The system suggestion;

1. **Data Collection:** The system collects pricing information from different retailers or sources for a wide range of products. This can be done through web scraping, APIs provided by retailers, or partnerships with vendors.
2. **Product Database:** The collected data is organized into a product database, where each product is associated with its attributes (e.g., brand, model, specifications) and prices from different sellers.
3. **Search Interface:** Users can search for products they are interested in by entering keywords, categories, or specific product details.
4. **Price Comparison:** The system displays a list of search results showing the product along with its prices from various retailers. Users can see the price differences and select the best option.
5. **Additional Information:** In addition to prices, the system may provide other relevant information such as product reviews, ratings, shipping costs, and availability.
6. **Alerts and Notifications:** Users may have the option to set price alerts for specific products. The system notifies them when the price of a desired product drops below a certain threshold.
7. **User Reviews and Feedback:** Users may have the ability to leave reviews and feedback on products and sellers, helping others make informed decisions.

Example; This one I refer to chat GPT

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matlab Copy code

% Price Comparison System

% Sample product database (can be replaced with actual data)
products = {'Laptop', 'Smartphone', 'Headphones', 'Tablet', 'Camera'};
retailers = {'Retailer A', 'Retailer B', 'Retailer C', 'Retailer D', 'Retailer E'};
prices = [1200, 800, 150, 400, 600;    % Laptop prices
          900, 600, 100, 350, 550;    % Smartphone prices
          80, 50, 30, 60, 90;         % Headphones prices
          500, 350, 80, 250, 400;     % Tablet prices
          1000, 700, 200, 450, 700]; % Camera prices

% Display available products to the user
disp('Available Products:');
for i = 1:numel(products)
    disp([num2str(i), '. ', products{i}]);
end

% Prompt the user to select products
selectedProducts = [];
while true
    productIndex = input('Enter the number corresponding to the product (0 to finish)');
    if productIndex == 0
        break;
    elseif productIndex < 1 || productIndex > numel(products)
        disp('Invalid product number. Please try again.');
```

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    else
        selectedProducts = [selectedProducts, productIndex];
    end
end

% Display prices for selected products from different retailers
disp('Price Comparison:');
for i = selectedProducts
    disp(['Product: ', products{i}]);
    disp('Retailer      Price');
    disp('-----');
    for j = 1:numel(retailers)
        disp([retailers{j}, '    $', num2str(prices(i, j))]);
    end
    disp('-----');
end
```